

What is claimed is:

1. A method of condensing computer code in a computer system, the computer code including a plurality of types of code structures, each of the types of code structures including a plurality of identifiers, and the computer system including a memory for storing the computer code therein, the method comprising the steps of:

reading the computer code the said memory;

creating a first list of the plurality of identifiers for a first of the types of code structures;

creating a first indexed list of the identifiers for the first type of code structure, the first indexed list including a plurality of index references, each of the identifiers in the first indexed list corresponding to at least one of the index references in the first indexed list; and

creating a condensed computer code, including the steps of scanning the computer code and replacing each occurrence in the computer code of the identifiers listed in the first indexed list with the respective index reference in the first indexed list corresponding to the respective identifier.

2. The method of claim 1, wherein the step of creating the first list of the plurality of identifiers includes scanning the computer code and introducing said identifiers into said list.

3. The method of claim 1, comprising the steps of:

creating a second list of the plurality of identifiers for a second of the types of code structures;

creating a second indexed list of the identifiers for the second type of code structure, the second indexed list including a plurality of index references, each of the identifiers in the second indexed list corresponding to at

least one of the index references in the second indexed list;  
and

creating a condensed computer code, including the steps of scanning the computer code and replacing each occurrence in the computer code of the identifiers listed in the second indexed list with the respective index reference in the second indexed list corresponding to the respective identifier.

4. The method of claim 3, comprising the steps of:

creating a third list of the plurality of identifiers for a third of the types of code structures;

creating a third indexed list of said identifiers for the third type of code structure, the third indexed list including a plurality of index references, each of the identifiers in the third indexed list corresponding to at least one of the index references within the third indexed list; and

creating a condensed computer code, including the steps of scanning the computer code and replacing each occurrence in the computer code of the identifiers listed in the third indexed list with the respective index reference in the third indexed list corresponding to the respective identifier.

5. The method of claim 1, wherein:

the code structures within the computer code include classes and the identifiers for the class code structures include class names,

the step of creating a first list of the plurality of identifiers includes creating a list of the class names,

the step of creating a first indexed list of the identifiers includes creating a first indexed list of classes and associating each of the classes with a unique index reference, and

the step of replacing each occurrence in the computer

code of the identifiers in the first list with the respective index reference includes replacing each class in the computer code with its respective index reference in the first indexed list.

6. The method of claim 1, wherein:

the code structures within the computer code include methods and the identifiers for the method code structures include method names,

the step of creating a first list of the plurality of identifiers includes creating a list of the method names,

the step of creating a first indexed list of the identifiers includes creating a first indexed list of methods and associating each of the methods with a unique index reference, and

the step of replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference includes replacing each method in the computer code with its respective index reference in the first indexed list.

7. The method of claim 1, wherein:

the code structures within the computer code include fields and the identifiers for the field code structures include field names,

the step of creating a first list of the plurality of identifiers includes creating a list of the field names,

the step of creating a first indexed list of the identifiers includes creating a first indexed list of fields and associating each of the fields with a unique index reference, and

the step of replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference includes replacing each field in the computer code with its respective index reference in the first indexed

list.

8. The method of claim 3, wherein:

the code structures within the computer code include methods and fields, the identifiers for the method code structures including method names and the identifiers for the field code structures including field names,

the step of creating a first list of the plurality of identifiers for the first of the types of code structures includes creating a list of the method names,

the step of creating a first indexed list of the identifiers for the first type of code structure includes creating a first indexed list of methods and associating each of the methods with a unique index reference,

the step of replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference includes replacing each method in the computer code with its respective index reference in the first indexed list,

the step of creating a second list of the plurality of identifiers for the second of the types of code structures includes creating a list of the field names,

the step of creating a second indexed list of said identifiers for the second type of code structure includes creating a second indexed list of fields and associating each of the fields with a unique index reference, and

the step of replacing each occurrence in the computer code of the identifiers in the second list with the respective index reference includes replacing each field in the computer code with its respective index reference in the second indexed list.

9. The method of claim 3, wherein:

the code structures within the computer code include classes and fields, the identifiers for the class code

structures including class names and the identifiers for the field code structures including field names,

the step of creating a first list of the plurality of identifiers for the first of the types of code structures includes creating a list of the class names,

the step of creating a first indexed list of the identifiers for the first type of code structure includes creating a first indexed list of classes and associating each of the classes with a unique index reference,

the step of replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference includes replacing each class in the computer code with its respective index reference in the first indexed list,

the step of creating a second list of the plurality of identifiers for the second of the types of code structures includes creating a list of the field names,

the step of creating a second indexed list of said identifiers for the second type of code structure includes creating a second indexed list of fields and associating each of the fields with a unique index reference, and

the step of replacing each occurrence in the computer code of the identifiers in the second list with the respective index reference includes replacing each field in the computer code with its respective index reference in the second indexed list.

10. The method of claim 3, wherein:

the code structures within the computer code include classes and methods, the identifiers for the class code structures including class names and the identifiers for the method code structures including method names,

the step of creating a first list of the plurality of identifiers for the first of the types of code structures includes creating a list of the class names,

the step of creating a first indexed list of the identifiers for the first type of code structure includes creating a first indexed list of classes and associating each of the classes with a unique index reference,

the step of replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference includes replacing each class in the computer code with its respective index reference in the first indexed list,

the step of creating a second list of the plurality of identifiers for the second of the types of code structures includes creating a list of the method names,

the step of creating a second indexed list of said identifiers for the second type of code structure includes creating a second indexed list of methods and associating each of the methods with a unique index reference, and

the step of replacing each occurrence in the computer code of the identifiers in the second list with the respective index reference includes replacing each method in the computer code with its respective index reference in the second indexed list.

11. A method of condensing computer code in a computer system, the computer code including class, method and field types of code structures, each type of code structure including a plurality of identifiers, and the computer system including a memory for storing the computer code therein, the method comprising the steps of:

reading the computer code from the memory;

creating lists of the plurality of identifiers for each of the class, method and field code structures within the computer code;

creating indexed lists of said identifiers for each of the class, method and field code structures, each of the respective indexed lists including a plurality of index

references, each of the identifiers in each of the lists corresponding to at least one of the index references in the respective indexed list; and

creating a condensed computer code, including the steps of scanning the computer code and replacing each occurrence within the computer code of the identifiers listed in each of the indexed lists with the respective index reference corresponding to the respective identifier.

12. A data storage medium including machine readable code thereon for use in a computer system having a memory for storing computer code, the computer code including a plurality of types of code structures, each of the types of code structures including a plurality of identifiers, the storage medium comprising:

means for creating a first list of the plurality of identifiers for a first of the types of code structures;

means for creating a first indexed list of the identifiers for the first type of code structure, the first indexed list including a plurality of index references, each of the identifiers in the first indexed list corresponding to at least one of the index references in the first indexed list; and

means for creating a condensed computer code, including means for scanning the computer code and replacing each occurrence in the computer code of the identifiers listed in the first indexed list with the respective index reference in the first indexed list corresponding to the respective identifier.

13. The data storage medium of claim 12 comprising:

means for creating a second list of the plurality of identifiers for a second of the types of code structures;

means for creating a second indexed list of the identifiers for the second type of code structure within the

computer code, the second indexed list including a plurality of index references, each of the identifiers in the second indexed list corresponding to at least one of the index references within the second indexed list; and

means for creating a condensed computer code, including means for scanning the computer code and replacing each occurrence in the computer code of the identifiers listed in the second indexed list with the respective index reference in the second indexed list corresponding to the respective identifier.

14. The data storage medium of claim 12, wherein:

the code structures within the computer code include classes, and the identifiers for the class code structures include class names,

the means for creating a first list of the plurality of identifiers creates a list of the class names,

the means for creating a first indexed list of the identifiers creates a first indexed list of classes and associates each of the classes with a unique index reference; and

the means for replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference replaces each class in the computer code with its respective index reference in the first indexed list.

15. The data storage medium of claim 12, wherein:

the code structures within the computer code include methods, and the identifiers for the method code structures include method names,

the means for creating a first list of the plurality of identifiers creates a list of the method names,

the means for creating a first indexed list of the identifiers creates a first indexed list of methods and



associates each of the methods with a unique index reference;  
and

the means for replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference replaces each method in the computer code with its respective index reference in the first indexed list.

16. The data storage medium of claim 12, wherein:

the code structures within the computer code include fields, and the identifiers for the field code structures include field names,

the means for creating a first list of the plurality of identifiers creates a list of the field names,

the means for creating a first indexed list of the identifiers creates a first indexed list of fields and associates each of the fields with a unique index reference;  
and

the means for replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference replaces each field in the computer code with its respective index reference in the first indexed list.

17. The data storage medium of claim 13, wherein:

the code structures in the computer code include methods and fields, the identifiers for the method code structures including method names and the identifiers for the field code structures including field names,

the means for creating a first list of the plurality of identifiers for the first of the types of code structures creates a list of the method names,

the means for creating a first indexed list of the identifiers for the first type of code structure creates a first indexed list of methods and associates each of the

methods with a unique index reference,

the means for replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference replaces each method in the computer code with its respective index reference in the first indexed list,

the means for creating a second list of the plurality of identifiers for the second of the types of code structures creates a list of the field names,

the means for creating a second indexed list of said identifiers for the second type of code structure creates a second indexed list of fields and associates each of the fields with a unique index reference, and

the means for replacing each occurrence in the computer code of the identifiers in the second list with the respective index reference replaces each field in the computer code with its respective index reference in the second indexed list.

18. The data storage medium of claim 13, wherein:

the code structures in the computer code include classes and fields, the identifiers for the class code structures including class names and the identifiers for the field code structures including field names,

the means for creating a first list of the plurality of identifiers for the first of the types of code structures creates a list of the class names,

the means for creating a first indexed list of the identifiers for the first type of code structure creates a first indexed list of classes and associates each of the classes with a unique index reference,

the means for replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference replaces each class in the computer code with its respective index reference in the first indexed

list,

the means for creating a second list of the plurality of identifiers for the second of the types of code structures creates a list of the field names,

the means for creating a second indexed list of said identifiers for the second type of code structure creates a second indexed list of fields and associates each of the fields with a unique index reference, and

the means for replacing each occurrence in the computer code of the identifiers in the second list with the respective index reference replaces each field in the computer code with its respective index reference in the second indexed list.

19. The data storage medium of claim 13, wherein:

the code structures in the computer code include classes and methods, the identifiers for the class code structures including class names and the identifiers for the method code structures including method names,

the means for creating a first list of the plurality of identifiers for the first of the types of code structures creates a list of the class names,

the means for creating a first indexed list of the identifiers for the first type of code structure creates a first indexed list of classes and associates each of the classes with a unique index reference,

the means for replacing each occurrence in the computer code of the identifiers in the first list with the respective index reference replaces each class in the computer code with its respective index reference in the first indexed list,

the means for creating a second list of the plurality of identifiers for the second of the types of code structures creates a list of the method names,

the means for creating a second indexed list of said

identifiers for the second type of code structure creates a second indexed list of methods and associates each of the methods with a unique index reference, and

the means for replacing each occurrence in the computer code of the identifiers in the second list with the respective index reference replaces each method in the computer code with its respective index reference in the second indexed list.

20. A data processing system having means for reading computer code, the computer code including a plurality of code structures, each code structure including an identifier, the data processing system comprising:

means for creating a list of the identifiers;

means for creating an indexed list of the identifiers, the indexed list including a plurality of index references, each of the identifiers in the indexed list corresponding to at least one of the index references in the indexed list; and

means for creating a condensed computer code, including means for scanning the computer code and replacing each occurrence in the computer code of the identifiers listed in the indexed list with the respective index reference in the indexed list corresponding to the respective identifier.

21. A method of condensing computer code in a computer system, the computer code including a plurality of types of code structures, each of the types of code structures including a plurality of identifiers, the method comprising the steps of:

creating a list of identifiers for each type of code structure;

creating an index reference corresponding to each of the identifiers in each of the lists; and

replacing each of the identifiers in the computer code with the respective index reference corresponding to each

respective identifier. *FA*

*Sub B2* 22. A method of interpreting computer code having a plurality of types of code structures, each of the types of code structures including a plurality of index references, the method comprising the steps of:

reading a list of identifiers for each type of code structure, each list including an index reference corresponding to each of the identifiers in the list; and

replacing each of the index references in the computer code with the respective identifier corresponding to each respective index reference.

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